

## **Preparation and steric structure of 2-Alkoxy-2,5-dioxo-4,4- bis(trifluoromethyl)-7(8)-chloro-1,3,2λ5-benzodioxaphosphepins : Effect of fluorinated fragments on the crystal packing**

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### **Abstract**

The reaction of hexafluoroacetone with 2-alkoxy-6(7)-chloro-1,3,2- benzodioxaphosphorin-ones yielded 7-and 8-chloro-substituted 2-alkoxy-2,5-dioxo-4,4-bis(trifluoromethyl)-1,3,2λ5-benzodioxaphosphepines. Their steric structure was studied by single-crystal X-ray diffraction. The effect of fluorinated substituents on the crystal packing of the benzophosphepines was demonstrated. Hydrolysis of these compounds gave the corresponding 4-and 5-chloro-substituted 2-(2-hydroxyphenyl)-2-oxo-1,1- bis(trifluoromethyl)-ethanols; the structure of 2-(2-hydroxy-5-chlorophenyl)-2- oxo-1,1-bis(trifluoromethyl)ethanol was also proved by single-crystal X-ray diffraction. © Pleiades Publishing, Inc., 2006.

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